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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/583,365	YAMAZAKI ET AL.	
	Examiner	Art Unit	
	ALEXANDER BELOUSOV	2894	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 April 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) *5-7* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 8-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/05/2010 has been entered.

2. **Examiner's Note**: In his latest amendment, the Applicant did two things: (1) amended the independent claims to read "particles comprising" (which does not really change the scope of the claim) and (2) amended the independent claims to read "insulating film (or resin film) comprising at least one selected from the group of polyimide, epoxy, acryl and polyimide" (which **might** change the scope of the claim). The reason for the word "might" is because the Examiner relies on the Yamazaki reference to teach the "insulating film" (or resin film) in question. The Yamazaki reference calls such film "an isotropic conductive material" and a "resin", which incidentally happens to be a perfect description of what "polyimide", "epoxy" or "acryl" are. So, the Yamazaki reference ***appears to insinuate*** "polyimide", "epoxy" or "acryl" materials, but, does not use those words explicitly. This puts the Examiner in a bind: does the Yamazaki reference teach these limitations or does it not teach these limitations?

3. In order to remove all doubt, the Examiner decided to bring in another reference (US-4481526 by Miyasaka) to use as the **evidence** that (1) one skilled in the art would have understood that an "isotropic conductive material" and a "resin" to which Yamazaki refers are in fact "polyimide", "epoxy" or "acryl" type materials ***OR alternatively*** that (2) it would be obvious

to one skilled in the art to use "polyimide", "epoxy" or "acryl" as the Yamazaki's an "isotropic conductive material" and a "resin".

4. Also, in order to remove all doubt, the reference in question is an ancient one, by the standards of the semiconductor manufacturing art – it is dated 11/06/1984 – and therefore is common knowledge in the art.

5. In short, the Examiner's new rejection is virtually identical to the Examiner's last rejection. The only real difference are the teachings provided by Mr. Miyasaka, whose teachings have been appended as the **evidence** at the end of the rejection of each of the independent claims.

6. Incidentally, the Examiner is not sure why the Applicant uses word "polyimide" twice in his amended limitations. The presumption is that this is some sort of typo and that it warrants a minor ***claim objection***, which is what this portion of the Examiner's Note is.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claim(s) 1-4 & 8-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over (US-6509217) by Reddy in view of (US-2001/0038127) by Yamazaki et al ("Yamazaki") and further in view of (US-2005/0140539) by Fujieda et al ("Fujieda").

Regarding claim 1, Reddy discloses in FIG. 3 and related text, **e.g.**, a semiconductor device comprising:

a substrate (10),

an integrated circuit including a thin film transistor (column 10, lines 8-10),

an antenna having a conducting wire (88, 96 & 92), and wherein the integrated circuit and the antenna are formed over the substrate to be electrically connected to each other (they are connected to each other).

Reddy does not disclose an insulating film comprising at least one selected from the group of polyimide, epoxy, acryl and polyimide over the conducting wire, and particles comprising a soft magnetic material are included in the insulating film.

Yamazaki discloses in FIG. 4A and related text, **e.g.**, an insulating film (215) and fine particles of a soft material (214; gold) are included in the insulating film.

Fujieda discloses in FIG. 5 and related text, **e.g.**, soft magnetic particles (paragraph 105, "Fe").

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Reddy with via 108/110 made of an insulating film and particles comprising a soft material are included in the insulating film, wherein the material is iron, in order to simplify the processing steps of making the device (the vias 108/110 of Reddy are made by filling metal into via holes; replacing the metal with conductive resin of Yamazaki would simplify the processing steps involved, since curing conductive resin is much simpler than depositing metal), and in order to absorb electromagnetic waves (see Fujieda, Title) and to reduce the cost of materials (replacing gold conductive particles with iron conductive particles would obviously result in large reduction in cost), respectively.

When the device of Reddy is modified with "via 108/110 made of an insulating film and fine particles of a soft material are included in the insulating film, wherein the material is iron",

it will result in "an insulating film (108 would be that film) over the conducting wire, and fine particles of a soft **magnetic** material (iron) are included in the insulating film".

Regarding the limitations of "comprising at least one selected from the group of polyimide, epoxy, acryl and polyimide", these limitations precisely describe the Yamazaki's "an isotropic conductive material" and a "resin", to which the Examiner refers above (Yamazaki, FIG. 4A, 215). As the Evidence of the Examiner's assertion, please see the US-4481526 by Miyasaka. Miyasaka discloses in column 1, lines 28-39 use of "a protective film made of a ***radiation shielding resin***, such as ***polyimide*** and silicone".

First of all, in the above passage Miyasaka teaches the use of resin which also happens to be polyimide (as the claim limitations of the independent claims demand) AND is also used for the purposes of radiation shielding (which is very close to what secondary reference of Fujieda refers to: absorption of electromagnetic radiation; the radiation type is different; but the idea of absorbing the radiation is the same). In short, Miyasaka not only provides the evidence that the resin in question is a polyimide, but also strengthens another part of the rejection (Fujieda's teachings). ***Alternatively***, Miyasaka demonstrates that the use of polyimide as a resin is obvious and gives an example of a benefit that such a resin can provide.

Second of all Miyasaka's teachings are from 1984, which means that by the time of the Applicant's invention (2005) the Miyasaka's teachings are notoriously well known and are not esoteric in any way.

Regarding claim 2, Reddy discloses in FIG. 3 and related text, **e.g.**, a semiconductor device comprising:

a substrate (10),

an integrated circuit including a thin film transistor (column 10, lines 8-10),

an antenna having a conducting wire (88, 96 & 92), and wherein the integrated circuit and the antenna are formed over the substrate to be electrically connected to each other (they are connected to each other).

Reddy does not disclose a resin film comprising at least one selected from the group of polyimide, epoxy, acryl and polyimide over the conducting wire, and particles comprising a soft magnetic material are included in the resin film.

Yamazaki discloses in FIG. 4A and related text, **e.g.**, a resin film (215) and fine particles of a soft material (214; gold) are included in the resin film.

Fujieda discloses in FIG. 5 and related text, **e.g.**, soft magnetic particles (paragraph 105, "Fe").

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Reddy with via 108/110 made of a resin film and particles comprising a soft material are included in the resin film, wherein the material is iron, in order to simplify the processing steps of making the device (the vias 108/110 of Reddy are made by filling metal into via holes; replacing the metal with conductive resin of Yamazaki would simplify the processing steps involved, since curing resin is much simpler than depositing metal), and in order to absorb electromagnetic waves (see Fujieda, Title) and to reduce the cost of materials (replacing gold conductive particles with iron conductive particles would obviously result in large reduction in cost), respectively.

When the device of Reddy is modified with "via 108/110 made of a resin film and fine particles of a soft material are included in the resin film, wherein the material is iron", it will

result in "a resin film (108 would be that film) over the conducting wire (88, 96 & 92), and fine particles of a soft **magnetic** material (iron) are included in the resin film".

Regarding the limitations of "comprising at least one selected from the group of polyimide, epoxy, acryl and polyimide", these limitations precisely describe the Yamazaki's "an isotropic conductive material" and a "resin", to which the Examiner refers above (Yamazaki, FIG. 4A, 215). As the Evidence of the Examiner's assertion, please see the US-4481526 by Miyasaka. Miyasaka discloses in column 1, lines 28-39 use of "a protective film made of a ***radiation shielding resin***, such as ***polyimide*** and silicone".

First of all, in the above passage Miyasaka teaches the use of resin which also happens to be polyimide (as the claim limitations of the independent claims demand) AND is also used for the purposes of radiation shielding (which is very close to what secondary reference of Fujieda refers to: absorption of electromagnetic radiation; the radiation type is different; but the idea of absorbing the radiation is the same). In short, Miyasaka not only provides the evidence that the resin in question is a polyimide, but also strengthens another part of the rejection (Fujieda's teachings). ***Alternatively***, Miyasaka demonstrates that the use of polyimide as a resin is obvious and gives an example of a benefit that such a resin would provide.

Second of all Miyasaka's teachings are from 1984, which means that by the time of the Applicant's invention (2005) the Miyasaka's teachings are notoriously well known and are not esoteric in any way.

Regarding claim 3, Reddy discloses in FIG. 3 and related text, **e.g.**, a semiconductor device comprising:

a substrate (10),

an integrated circuit including a thin film transistor (column 10, lines 8-10),

an antenna having a conducting wire (88, 96 & 92),

a first insulating film (104) covering the conducting wire and the thin film transistor, and wherein the integrated circuit and the antenna are formed over the substrate to be electrically connected to each other (they are connected to each other).

Reddy does not disclose a second insulating film comprising at least one selected from the group of polyimide, epoxy, acryl and polyimide over the first insulating film covering the conducting wire, and particles comprising a soft magnetic material are included in the second insulating film.

Yamazaki discloses in FIG. 4A and related text, **e.g.**, a second insulating film (215) and fine particles of a soft material (214; gold) are included in the second insulating film.

Fujieda discloses in FIG. 5 and related text, **e.g.**, soft magnetic particles (paragraph 105, "Fe").

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Reddy with via 108/110 made of a second insulating film and particles comprising a soft material are included in the second insulating film, wherein the material is iron, in order to simplify the processing steps of making the device (the vias 108/110 of Reddy are made by filling metal into via holes; replacing the metal with conductive resin of Yamazaki would simplify the processing steps involved, since curing conductive resin is much simpler than depositing metal), and in order to absorb electromagnetic waves (see Fujieda, Title) and to reduce the cost of materials (replacing gold conductive particles with iron conductive particles would obviously result in large reduction in cost), respectively.

When the device of Reddy is modified with "via 108/110 made of a second insulating film and fine particles of a soft material are included in the second insulating film, wherein the material is iron", it will result in "a second insulating film (108 would be that film) over the first insulating film (104; 108 is in direct contact with it; hence, "over") covering the conducting wire, and fine particles of a soft **magnetic** material (iron) are included in the second insulating film".

Regarding the limitations of "comprising at least one selected from the group of polyimide, epoxy, acryl and polyimide", these limitations precisely describe the Yamazaki's "an isotropic conductive material" and a "resin", to which the Examiner refers above (Yamazaki, FIG. 4A, 215). As the Evidence of the Examiner's assertion, please see the US-4481526 by Miyasaka. Miyasaka discloses in column 1, lines 28-39 use of "a protective film made of a ***radiation shielding resin***, such as ***polyimide*** and silicone".

First of all, in the above passage Miyasaka teaches the use of resin which also happens to be polyimide (as the claim limitations of the independent claims demand) AND is also used for the purposes of radiation shielding (which is very close to what secondary reference of Fujieda refers to: absorption of electromagnetic radiation; the radiation type is different; but the idea of absorbing the radiation is the same). In short, Miyasaka not only provides the evidence that the resin in question is a polyimide, but also strengthens another part of the rejection (Fujieda's teachings). ***Alternatively***, Miyasaka demonstrates that the use of polyimide as a resin is obvious and gives an example of a benefit that such a resin would provide.

Second of all Miyasaka's teachings are from 1984, which means that by the time of the Applicant's invention (2005) the Miyasaka's teachings are notoriously well known and are not esoteric in any way.

Regarding claim 4, Reddy discloses in FIG. 3 and related text, **e.g.**, a semiconductor device comprising:

a substrate (10),

an integrated circuit including a thin film transistor (column 10, lines 8-10),

an antenna having a conducting wire (88, 96 & 92),

an insulating film (104) covering the conducting wire and the thin film transistor (it is in direct contact with both), and wherein the integrated circuit and the antenna are formed over the substrate to be electrically connected to each other (they are connected to each other).

Reddy does not disclose a resin film comprising at least one selected from the group of polyimide, epoxy, acryl and polyimide over the insulating film covering the conducting wire, and particles comprising a soft magnetic material are included in the resin film.

Yamazaki discloses in FIG. 4A and related text, **e.g.**, a resin film (215) and fine particles of a soft material (214; gold) are included in the resin film.

Fujieda discloses in FIG. 5 and related text, **e.g.**, soft magnetic particles (paragraph 105, "Fe").

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Reddy with via 108/110 made of a resin film and particles comprising a soft material are included in the resin film, wherein the material is iron, in order to simplify the processing steps of making the device (the vias 108/110 of Reddy are made by filling metal into via holes; replacing the metal with conductive resin of Yamazaki would simplify the processing steps involved, since curing resin is much simpler than depositing metal), and in order to absorb electromagnetic waves (see Fujieda, Title) and to reduce the cost of materials (replacing gold

conductive particles with iron conductive particles would obviously result in large reduction in cost), respectively.

When the device of Reddy is modified with "via 108/110 made of a resin film and fine particles of a soft material are included in the resin film, wherein the material is iron", it will result in "a resin film (108 would be that film) covering the conducting wire (88, 96 & 92), and fine particles of a soft **magnetic** material (iron) are included in the resin film".

Regarding the limitations of "comprising at least one selected from the group of polyimide, epoxy, acryl and polyimide", these limitations precisely describe the Yamazaki's "an isotropic conductive material" and a "resin", to which the Examiner refers above (Yamazaki, FIG. 4A, 215). As the Evidence of the Examiner's assertion, please see the US-4481526 by Miyasaka. Miyasaka discloses in column 1, lines 28-39 use of "a protective film made of a ***radiation shielding resin***, such as ***polyimide*** and silicone".

First of all, in the above passage Miyasaka teaches the use of resin which also happens to be polyimide (as the claim limitations of the independent claims demand) AND is also used for the purposes of radiation shielding (which is very close to what secondary reference of Fujieda refers to: absorption of electromagnetic radiation; the radiation type is different; but the idea of absorbing the radiation is the same). In short, Miyasaka not only provides the evidence that the resin in question is a polyimide, but also strengthens another part of the rejection (Fujieda's teachings). ***Alternatively***, Miyasaka demonstrates that the use of polyimide as a resin is obvious and gives an example of a benefit that such a resin would provide.

Second of all Miyasaka's teachings are from 1984, which means that by the time of the Applicant's invention (2005) the Miyasaka's teachings are notoriously well known and are not esoteric in any way.

Regarding claim 8, Reddy discloses in FIG. 3 and related text, **e.g.**, a semiconductor device comprising:

a substrate (10),

an integrated circuit including a thin film transistor (column 10, lines 8-10),

an antenna having a conducting wire (88, 96 & 92),

a first insulating film (104) covering the conducting wire and the thin film transistor (it is in direct contact with both), and a second insulating film at least adjacent to a side of the conducting wire by interposing the first insulating film therebetween,

wherein the integrated circuit and the antenna are formed over the substrate to be electrically connected to each other (they are connected to each other).

Reddy does not disclose a second insulating film comprising at least one selected from the group of polyimide, epoxy, acryl and polyimide at least adjacent to a side of the conducting wire by interposing the first insulating film therebetween, and particles comprising a soft magnetic material are included in the second insulating film.

Yamazaki discloses in FIG. 4A and related text, **e.g.**, a second insulating film (215) and fine particles of a soft material (214; gold) are included in the second insulating film.

Fujieda discloses in FIG. 5 and related text, **e.g.**, soft magnetic particles (paragraph 105, "Fe").

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Reddy with via 108/110 made of a second insulating film and particles comprising a soft material are included in the second insulating film, wherein the material is iron, in order to simplify the processing steps of making the device (the vias 108/110 of Reddy are made by filling metal into via holes; replacing the metal with conductive resin of Yamazaki would simplify the processing steps involved, since curing conductive resin is much simpler than depositing metal), and in order to absorb electromagnetic waves (see Fujieda, Title) and to reduce the cost of materials (replacing gold conductive particles with iron conductive particles would obviously result in large reduction in cost), respectively.

When the device of Reddy is modified with "via 108/110 made of a second insulating film and fine particles of a soft material are included in the second insulating film, wherein the material is iron", it will result in "a second insulating film (108 would be that film) at least adjacent to a side of the conducting wire (88, 96 & 92) by interposing the first insulating film (104) therebetween, and fine particles of a soft **magnetic** material (iron) are included in the second insulating film".

Regarding the limitations of "comprising at least one selected from the group of polyimide, epoxy, acryl and polyimide", these limitations precisely describe the Yamazaki's "an isotropic conductive material" and a "resin", to which the Examiner refers above (Yamazaki, FIG. 4A, 215). As the Evidence of the Examiner's assertion, please see the US-4481526 by Miyasaka. Miyasaka discloses in column 1, lines 28-39 use of "a protective film made of a ***radiation shielding resin***, such as ***polyimide*** and silicone".

First of all, in the above passage Miyasaka teaches the use of resin which also happens to be polyimide (as the claim limitations of the independent claims demand) AND is also used for the purposes of radiation shielding (which is very close to what secondary reference of Fujieda refers to: absorption of electromagnetic radiation; the radiation type is different; but the idea of absorbing the radiation is the same). In short, Miyasaka not only provides the evidence that the resin in question is a polyimide, but also strengthens another part of the rejection (Fujieda's teachings). ***Alternatively***, Miyasaka demonstrates that the use of polyimide as a resin is obvious and gives an example of a benefit that such a resin would provide.

Second of all Miyasaka's teachings are from 1984, which means that by the time of the Applicant's invention (2005) the Miyasaka's teachings are notoriously well known and are not esoteric in any way.

Regarding claim 9, Reddy discloses in FIG. 3 and related text, **e.g.**, a semiconductor device comprising:

a substrate (10),

an integrated circuit including a thin film transistor (column 10, lines 8-10),

an antenna having a conducting wire (88, 96 & 92),

an insulating film (104) covering the conducting wire and the thin film transistor (it is in direct contact with both),

wherein the integrated circuit and the antenna are formed over the substrate to be electrically connected to each other (they are connected to each other).

Reddy does not disclose a resin film comprising at least one selected from the group of polyimide, epoxy, acryl and polyimide at least adjacent to a side of the conducting wire by

interposing the insulating film therebetween, and particles comprising a soft magnetic material are included in the resin film.

Yamazaki discloses in FIG. 4A and related text, **e.g.**, a resin film (215) and fine particles of a soft material (214; gold) are included in the resin film.

Fujieda discloses in FIG. 5 and related text, **e.g.**, soft magnetic particles (paragraph 105, "Fe").

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Reddy with via 108/110 made of a resin film and particles comprising a soft material are included in the resin film, wherein the material is iron, in order to simplify the processing steps of making the device (the vias 108/110 of Reddy are made by filling metal into via holes; replacing the metal with conductive resin of Yamazaki would simplify the processing steps involved, since curing resin is much simpler than depositing metal), and in order to absorb electromagnetic waves (see Fujieda, Title) and to reduce the cost of materials (replacing gold conductive particles with iron conductive particles would obviously result in large reduction in cost), respectively.

When the device of Reddy is modified with "via 108/110 made of a resin film and fine particles of a soft material are included in the resin film, wherein the material is iron", it will result in "a resin film (108 would be that film) at least adjacent to a side of the conducting wire (88, 96 & 92) by interposing the insulating film (104) therebetween, and fine particles of a soft **magnetic** material (iron) are included in the resin film".

Regarding the limitations of "comprising at least one selected from the group of polyimide, epoxy, acryl and polyimide", these limitations precisely describe the Yamazaki's "an

isotropic conductive material" and a "resin", to which the Examiner refers above (Yamazaki, FIG. 4A, 215). As the Evidence of the Examiner's assertion, please see the US-4481526 by Miyasaka. Miyasaka discloses in column 1, lines 28-39 use of "a protective film made of a ***radiation shielding resin***, such as ***polyimide*** and silicone".

First of all, in the above passage Miyasaka teaches the use of resin which also happens to be polyimide (as the claim limitations of the independent claims demand) AND is also used for the purposes of radiation shielding (which is very close to what secondary reference of Fujieda refers to: absorption of electromagnetic radiation; the radiation type is different; but the idea of absorbing the radiation is the same). In short, Miyasaka not only provides the evidence that the resin in question is a polyimide, but also strengthens another part of the rejection (Fujieda's teachings). ***Alternatively***, Miyasaka demonstrates that the use of polyimide as a resin is obvious and gives an example of a benefit that such a resin would provide.

Second of all Miyasaka's teachings are from 1984, which means that by the time of the Applicant's invention (2005) the Miyasaka's teachings are notoriously well known and are not esoteric in any way.

Regarding claim 10, Reddy discloses in FIG. 3 and related text, **e.g.**, the integrated circuit and the antenna are formed over a flexible substrate (column 17, lines 4 & 5).

Regarding claim 11, Reddy discloses in FIG. 3 and related text, **e.g.**, the conducting wire (88, 92 & 96).

Regarding the process limitations recited in claim 11 ("formed by an electroplating method, an electroless plating method, a printing method, or a droplet discharging method"),

these would not carry patentable weight in this claim drawn to a structure, because distinct structure is not necessarily produced.

Note that a "product by process" claim is directed to the product per se, no matter how actually made, In re Hirao, 190 USPQ 15 at 17 (footnote 3). See also In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Fessmann, 180 USPQ 324; In re Avery, 186 USPQ 161; In re Wertheim, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); and In re Marosi et al., 218 USPQ 289, all of which make it clear that it is the patentability of the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that the applicant has the burden of proof in such cases, as the above case law makes clear.

Regarding claim 12, Reddy discloses in FIG. 3 and related text, **e.g.**, the conducting wire (88, 92 & 96) includes a first conductor (92) and a second conductor (96) covering the first conductor.

Regarding claim 13, Reddy discloses in FIG. 3 and related text, **e.g.**, the second conductor (96).

Regarding the process limitations recited in claim 13 ("formed by an electroplating method, an electroless plating method, or a droplet discharging method"), these would not carry patentable weight in this claim drawn to a structure, because distinct structure is not necessarily produced.

Note that a "product by process" claim is directed to the product per se, no matter how actually made, In re Hirao, 190 USPQ 15 at 17 (footnote 3). See also In re Brown, 173 USPQ

685; In re Luck, 177 USPQ 523; In re Fessmann, 180 USPQ 324; In re Avery, 186 USPQ 161; In re Wertheim, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); and In re Marosi et al., 218 USPQ 289, all of which make it clear that it is the patentability of the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that the applicant has the burden of proof in such cases, as the above case law makes clear.

Regarding claim 14, the combination of Reddy, Yamazaki and Fujieda discloses the soft magnetic material is Fe; Co; Ni; an alloy including at least one of Fe, Co, and Ni; 3Y2O3.5Fe2O3 (YIG); Fe203; Fe-Si-AI alloy; Fe-Cr alloy; FeP alloy; a permalloy in which Ni or Ni-Fe alloy is added with at least one of Mo, Cu, Cr, and Nb; or a soft ferrite (see rejection of claims 1-4, 8 & 9).

Conclusion

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Belousov whose telephone number is 571-270-3209. The examiner can normally be reached on Monday - Thursday 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Nguyen can be reached on 571-272-2402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander Belousov/
Examiner, Art Unit 2894
04/23/2010

/Bradley K Smith/
Primary Examiner, Art Unit 2894